gentec-e

THZ9D-20MS-BL-D0

THz detector for power measurements up to 25 mW.



KEY FEATURES

RELATIVE MEASUREMENTS FROM 0.1 TO 30 THZ

Broadband, room temperature operation, easier to use and less expensive than a Golay cell

FLAT SPECTRAL RESPONSE

Get the best precision accross the entire wavelength range.

MEASURE HIGHER POWERS

Up to 3 W of continuous power with the THZ12D model, the highest in our THz range of products

LARGE APERTURE

Models range from 9 to 12 mm Ø aperture.

CALIBRATED AT 10.6 MM

THZ-D detectors are calibrated at a single wavelength (10.6 $\mu m)$ and include wavelength correction data from 10.6 to 440 μm . They are used for relative measurements outside that range.

COMPATIBLE STAND

STAND-D-233

SPECIFICATIONS

MEASUREMENT CAPABILITIES	
Maximum average power	25 mW
Noise equivalent power ¹	300 nW
Spectral range ²	10 - 3000 μm
Frequency ³	0.1 - 30 THz
Typical rise time ⁴	0.2 s
Typical power sensitivity ⁵	120 V/W
Power calibration uncertainty ⁶	±5.0 %
Repeatability	±0.5 %
Chopping frequency ⁷	10 Hz
Minimum repetition rate ⁸	1000 Hz

1. Nominal value. Actual value depends on electrical noise in the measurement system.

2. From 10 to 440 µm, spectrometer measurement with multiple laser references validation. From 440 to 600 µm, spectrometer measurement only. From 600 to 3000 µm, relative measurement only. This spectral range is subject to change.

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4. With anticipation.

5. Into 100 k Ω load. Maximum output voltage = sensitivity x maximum power.

6. Including linearity with power.

7. SDC-500 digital optical chopper sold separately

8. Minimum repetition rate for stable average power measurements.

DAMAGE THRESHOLDS

Maximum average power density	0.05 W/cm²
Maximum energy density	0.1 J/cm ²
PHYSICAL CHARACTERISTICS	
Aperture diameter	9 mm
Absorber	BL
Dimensions	38.1Ø x 26.2 mm

Weight

THZ9D-20mS-BL-D0

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INTERESTED IN THIS PRODUCT?

GET A QUOTE

Find your local sales representative at gentec-eo.com/contact-us